

DuPont™ Kalrez® 6230

Technical Information — September 2010

Product Description

DuPont™ Kalrez® 6230 perfluoroelastomer parts are compliant with the United States' Food and Drug Administration's regulations for repeated use in contact with food as described by 21 CFR177.2600 and Food Contact Notification 000101. Kalrez® parts made from compound 6230 have been tested in accordance with the United States Pharmacopoeia Class VI (USP Class VI) testing protocol and meet the test requirements of a USP Class VI polymer. This is a black product that offers excellent steam cycling resistance and reduces extractables from sealing materials to trace levels.

Typical Physical Properties¹

| | |
|--|--------------|
| Color | Black |
| Maximum Application Temperature ² , °C (°F) | 260 (500) |
| Maximum Application Pressure ² , MPa (psi) | 8.27 (1200) |
| Durometer, Shore A ³ | 75 |
| Durometer, Shore M (o-ring) | |
| 100% Modulus ⁴ , MPa (psi) | 7.03 (1020) |
| Elongation at break ⁴ , % | 170 |
| Tensile at break ⁴ , MPa (psi) | 16.54 (2400) |
| Compression set ⁵ , % (70 hours at 204°C (400°F)) | |
| Pellet | 24 |
| Size 214 O-Ring | 30 |
| Specific Gravity, g/cc | 1.99 |

¹Not to be used for specification

²DuPont proprietary test method – maximum application temperature and pressure may vary with seal design and application specifics

³ASTM D2240 (pellet test specimen)

⁴ASTM D412, 500mm/min

⁵ASTM D395B



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Additional Physical Properties¹

| | |
|--|--|
| T _g ² , °C (°F) | |
| TR-10 ³ , °C (°F) | -3 (26) |
| Brittle Point ⁴ , °C (°F) | |
| Linear Coefficient of Thermal Expansion, /°C (/°F) | 2.89x10 ⁻⁴ (1.60x10 ⁻⁴) |
| Abrasion Resistance ⁵ , (volume loss, cubic mm) | |
| Coefficient of friction ⁶ (to steel) | |
| Static | |
| Dynamic | |
| Volume resistivity ⁷ , ohms/square | |
| Surface resistivity ⁷ , Ohm-cm | |
| Dielectric Constant ⁸ at 150°C and 1 MHz | |
| Dissipation Factor ⁸ at 150°C and 1MHz | |

¹Not to be used for specification

²DuPont proprietary test method – maximum application temperature and pressure may vary with seal design and application specifics

³ASTM D1329

⁴ASTM D746

⁵Din 53 516

⁶ASTM 1894

⁷ASTM D 257

⁸ASTM D150

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